

## Craftstone Architects, Inc.

14150 S Route 30, Suite 201 Plainfield, Illinois 60544

P: 815.609.1997 F: 815.327.8827 www.CraftstoneArchitects.com

February 27, 2019

Gabrielle Mattingly City of Naperville - Historic Preservation Commission 400 S. Eagle Street Naperville, Illinois 60540

Re:

Demolition of Existing Home 26 N. Sleight Street, Naperville, IL

Dear Ms Mattingly:

We were retained to make an assessment to the structural integrity of the existing house located in the Naperville Historic District at the address noted above. I personally visited the site on January 23, 2019 and did a walk through and around the entire building with Dan Kittilsen of DJK custom homes to observe the existing conditions.

The existing home is a 2-story wood framed home on Stone foundation (see image 1) with about a 6'6" deep basement under the original home. From our observations, it appears 2 additions were added to the main house. The first addition (see image 2) is added to the rear (east side) of the home and is a 1-story wood framed addition (see image 3) on stone foundation with a shallow above grade crawl with dirt floor. The second addition is added to the left side (north) of the home and is a 1-story wood framed addition on a concrete foundation. I could not access crawl, so could not observe crawl conditions. We understand from information obtained from the City of Naperville web site that the original home was built around 1875, but we are unsure when additions were added.

It is our understanding that the home's previous owner was a hoarder and while most of the homes contents were already cleared out when I was there, there was still a significant amount of contents with signs of filth everywhere and mold in several locations, including the kitchen and bath on first floor (see image 4), and the bath (see image 5), the back bedroom (see image 6 & 7) and hall on the second floor. The walls in many locations showed signs of stress or settling cracks and many of the walls were no longer plumb. There were several walls, both interior and exterior, that were significantly leaning and out of plumb. One interior wall in the front room with a door to the foyer (see image 8) was noticeably not square in the jamb any longer due to settling and leaning of walls. The south exterior wall we used a level and estimate the top of the wall was leaning out and out of plumb about 4" to 5". This alone was very concerning to us and is a potential hazard to neighbor's house if this were to fail as it would most likely land on the neighboring house to the south. This was only one of many walls that were of concern.

The floors did show signs of settling towards the outside, with the north side addition having a very noticeable drop to the north of about 3 or 4 inches in 10 feet. When observed from the exterior, this is the area where the addition is on a concrete foundation and it appears the foundation has settled more than the stone foundation (see image 9) and has cracked with significant separation of the foundation in at least one location (see image 10). A bay bump out on the south side off the dining room has signs of significantly dropped from the inside (see image 11) and when observed from the exterior, the stone foundation has failed and is pulling away from the home (see image 12). Another concern to us and potential hazard to surround area.

Plumbing in the house is the cast iron sewer and the water service does appear to be the lead pipes (see image 13). Many of the exposed hvac pipes in the basement did have corrosion (image 14), thus they may have been exposed to some type of moisture. While some of the electrical appears to have been upgraded to conduit, there where still signs of the old rope wiring (see image 15). From our observation, all the Mechanical, Electrical and Plumbing should be replaced entirely to the street.



In the basement, upon observation from the inside, there are signs of cracking and failing foundation and it can be seen that the stone has been patched with mortar as some point in time, but many joints with a little rubbing of your finger, the mortar just scraps away (see image 16). There are many locations of cracked stone and areas near the bottom of the wall that appear to be location of water seepage where all the mortar has washed away (see image 13, 17 & 18). From the outside, the stone foundation is cracked with some showing signs of patching in many locations as you walk around (see image 19 & 21). The foundation at the exterior basement access and dining room bay bump out on the south, is pulled away and failing and is tipping out from the rest of the foundation (see image 12 & 22), which explains why floor and walls are dropped in that location. As mentioned before, the concrete foundation at the north is dropped lower than the stone foundation and has several cracks in that foundation, with one showing significant separation. The rear crawl stone wall has many cracks, with most appearing to have been recently patched to help hide the cracking and separation (see image 20).

Back in the basement, there were some areas of rotting wood and the 3 round wood columns supporting the middle beam are rotting at the base and appear to be bearing on the concrete floor (see image 23). It is unknown if there is a proper footing under these columns. However, due to the column rot, they need replacement. The wood beam, by today's structural standards is undersized for the loads imposed on it and should be replaced. I could not get under crawl to properly observe

As for the exterior façade, you can see location of siding rotting (see image 24) and in one location on the south side, there appears to be plant material that was cut down that is in the wall and behind the siding and wall sheathing (see image 25), but unclear how far up wall it extends. There are signs of the plant still climbing up the foundation and wall. The front stoop appears to be settling and railings do not meet the current codes, and both should be replaced. Both the front door and rear door were difficult to open due to sticking in the jamb from uneven walls. The entire rear porch showed signs of rot and failing and should be replaced. All windows should be replaced. While roof was covered in snow at our time of observation, it was seen in the second floor south rear bedroom that roof was leaking significantly and plaster has fallen and mold has developed in that area (see image 6 & 7), so it is anticipated that some or all of the roof would need repair and new roofing at a minimum.

While we understand that tearing down a building in the historic district is strongly discouraged, this home overall is decrepit and in very unsafe condition. Taking what we observed, from the failing foundation to the uneven floors to the leaning and failing walls to the need to replace almost every item in the home, it would be this Architect's opinion that this home be demolished. This home as is and anything short of tearing it down, poses a life safety concern for the occupants of the home, the area around the home and potentially the home to the south if the leaning exterior south foundation and wall did indeed fail completely.

If you should have any questions for me, please contact me at mike.buhr@craftstonearchitects.com or at 815.609.1997.

Sincerely,

Craftstone Architects, Inc.

Michael A. Buhr, AIA, ALA

Cc: File

President





Image 1 – Existing house from southwest corner



Image 2 - North addition from northwest corner





Image 3 - East addition from northeast corner



Image 4 – First floor bathroom with filth and signs of mold around toilet.





Image 5 – 2<sup>nd</sup> floor bathroom with signs of mold



 $Image\ 6-2^{nd}\ floor\ southeast\ bedroom\ with\ ceiling\ falling\ in\ and\ showing\ signs\ of\ mold\ due\ to\ water\ damage$ 





Image 7 - 2<sup>nd</sup> floor southeast bedroom with ceiling falling in and showing signs of mold due to water damage



Image 8 – Door to foyer from front living room that is no longer square in jamb and stuck closed





Image 9 – Concrete foundation dropped or settling at stone foundation. Stone foundation has signs of cracking also.







Image 11 – Bay bump out at dining room from inside with floor, walls and ceiling dropping at outside wall.



Image 12 – Bay bump out at dining room with dropped floor, walls & ceiling. Foundation cracked and pulled away from main foundation.





Image 13 – water meeting with copper connections to lead water piping. Also, bottom of wall where bricks and stones located have holes where water and debris is filtering into basement.



Image 14 – Ductwork is corroding and stone foundation has signs of patching large cracks with plastic bags shoved in cracks and towards bottom one of the cracks appears to be filled with silicone caulk.



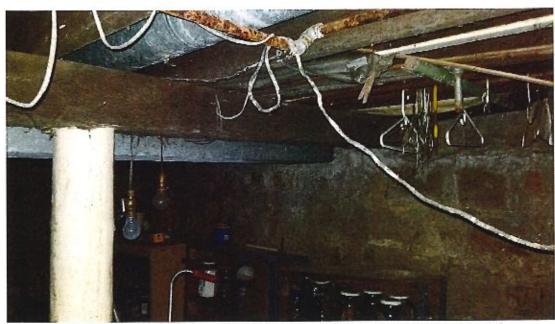


Image 15 – Undersized basement wood beam with lights hanging from ceiling with rope cord



Image 16 – Stone foundation joints patched and if rubbed with finger, is rubs off as can be seen with sand sitting on wood ledge.





Image 17 – Stone foundation wall plugged with stone and brick with signs of water and sediment entering basement from outside.

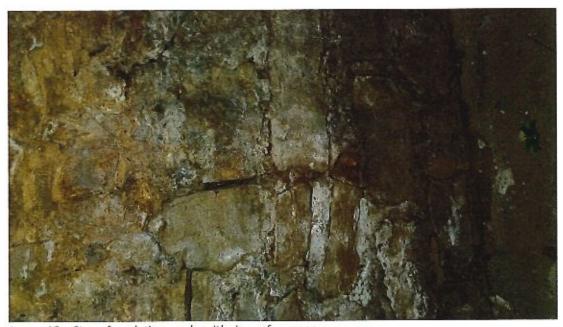


Image 18 – Stone foundation cracks with signs of seepage.





Image 19 – Stone foundation with signs of patching



Image 20 - Stone foundation with signs of patching





Image 21 - Stone foundation with signs of patching



Image 22 – Stone foundation at exterior basement access pulling away and failing.





Image 23 – Rotting wood post in basement supporting middle beam



Image 24 – Rotting siding





Image 25 – Plant material found under siding and in wall on south side exterior wall

## JOHNSON WILBUR ADAMS, INC.

Structural Engineering

2/22/2019

Dan Kittilsen DJK Custom Homes 26108 Stewart Ridge Drive Plainfiled, IL 60585

Re: Structural Condition Assessment

26 N. Sleight Street Naperville, IL 60540 JWA Project No. 2019101

Dear Mr. Kittilsen,

Per your request, we evaluated the structural integrity of the existing single family home at 26 N. Sleight Street in Naperville, Illinois. I performed a walk through on February 20, 2019 to observe the existing structure and identify areas of concern.

The existing building is a two story wood framed single family home on stone foundation walls with a partial basement. The original house was built around 1875 with a basement and it appears two single story additions were added with inaccessible crawl spaces. It is unclear when the additions were added but the rear addition is on stone foundation walls and the side addition has poured concrete walls.

The original stone and mortar foundation had visible cracks (Image 1). It appears some attempt was made to fill the cracks with mortar but the cracks have continued to expand. There was significant settlement and deformation observed between the poured concrete for the north addition and original stone foundations (Image 2 & 3). This deformation was noticeable on both the floor and wall inside the home. The poured foundation wall also had a large crack on the north wall (Image 4).

The interior surface of the basement foundation wall had similar cracking as the exterior of the foundation wall and some of the mortar crumbles to the touch. One of the timber columns supporting the mid-beam did not appear to be anchored to the beam or foundation and was visibly leaning (image 5 & 6). It was unclear if the posts are supported on foundations or if they are just sitting on the slab. At various locations throughout the basement there were clear signs of damage to both the stone and the mortar (Image 7) as well as signs of water intrusion.

Throughout the interior of the home the floors were not level and uneven. Where the north addition was added there was a visible high spot in the floor over the original stone foundation wall and the floor for the addition was sagging down to the north (Image 8). This sagging corresponds with the deformation observed on the foundations. In addition to the floor sagging, the walls are visibly leaning and the plaster is cracked throughout the house. This was especially noticeable on the south wall at the window bay bump out. The wall can be seen leaning outward on the exterior where the foundation is also pulling away from the main structure (Image 9).

The second floor contained many of the same deformed floors and walls (Image 10) as the first floor as well as showing obvious areas of water damage (Image 11). No observations

were made in the attic but given the amount of water leakage it is safe to assume the rafters and ceiling joists may need to be repaired or replaced.

Based on our observations the structure is in significant need of major repairs. At this time it is our opinion the foundation walls and footings would need to be rebuilt as well as providing updated beams, columns and footings. However, given the extent of the structural damage throughout the house this may not be economically feasible. There is no way to quantify the extent of these repairs or even how practical they are until the all the interior finishes are removed and a full structural analysis can be performed on the exposed structure. Based on the extent of the structural damage detailed in this report, it is our opinion this house should be demolished.

If you have any questions regarding this report, please feel free to call me.

## Scope and Limitation:

This report is a qualitative review of the structure and does not represent an exhaustive structural analysis of the building and its components. This report addresses the exposed and accessible structural framing only. This report does not address nonstructural Items such as mechanical, plumbing and electrical systems, weather enclosure Items (roofing, gutters, siding, doors, windows, etc), life safety and accessibility issues, architectural features, pest control, mold, mildew, fungus, hazardous materials etc. All structural observations were visual only; no measurements or tests were performed. The observations were limited to the exposed and accessible areas of the building. The opinions and recommendations given above are based on the conditions assessed at the time of the observations. JWA reserves the right to modify or change any of these opinions in the event that other areas of construction are made accessible for observation or other documents and information about the structure become available. JWA makes no warranties, expressed or implied in this report.

Sincerely Yours,

Nathan D. Mowry

Johnson Wilbur Adams, Inc.

Senior Associate

Kent. L Adams, S.E.

Johnson Wilbur Adams, Inc.

Principal

ADAMS 81 006894 BE OF 11 LINGUISH License Exp. 11/30/20

STRUCTURAL PROPERTY

KENT L.

Image 1 - Typical stone foundation walls with cracks



Image 2 - Separation of concrete for the addition and original stone foundation



Image 3 - Separation of foundation and wood floor structure



Image 4 - Crack in north foundation wall



Image 5 - Basement column



Image 6 - Basement column



Image 7 - Basement column



Image 8 - high spot in floor



Image 9 - Leaning foundation and exterior wall



Image 10 - Leaning wall at stair

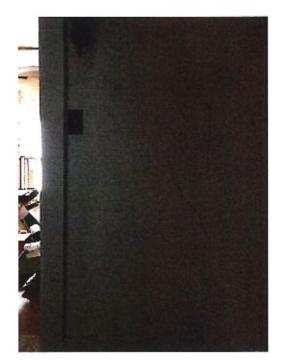


Image 11 - Water damage on second floor ceiling

